SONY

4-204-413-61(1)

Trinitron Colour Television

Instruction Manual

GB

KV-21X5

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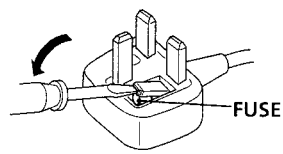
NOTICE FOR CUSTOMERS IN THE UNITED KINGDOM

A moulded plug complying with BS1363 is fitted to this equipment for your safety and convenience.
Should the fuse in the plug supplied need to be replaced, a 5 AMP fuse approved by ASTA or BSI to BS 1362 (i.e. marked with ⓐ or ⓑ) must be used.
When an alternative type of plug is used it should be fitted with a 5 AMP FUSE, otherwise the circuit should be protected by a 5 AMP FUSE at the distribution board.
If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.



How to replace the fuse

Open the fuse compartment with a blade screwdriver, and replace the fuse.

- **IMPORTANT**

  If the plug supplied is not suitable for the socket outlets in your home, it should be cut off and an appropriate plug fitted in accordance with the following instructions:
  The wires in this mains lead are coloured in accordance with the following code:
  Blue Neutral
  Brown Live
  As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
  The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red. Do not connect either wire to the earth terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green and yellow.

WARNING

- To prevent shock hazard, do not insert the plug cut off from the mains lead into a socket outlet. This plug cannot be used and should be destroyed.
- To prevent fire or shock hazard, do not expose the unit to rain or moisture.
- Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing to qualified personnel only.

Instruction Manual **GB**

WARNING

Safety Information

All TVs operate on extremely high voltages. To prevent fire or electric shock, please follow the safety procedures indicated below. For your protection, refer all servicing to qualified personnel only.

For General Safety

- Do not expose the TV set to rain or moisture.
- Do not remove the rear cover.

For Safe Installation

- Do not install the TV in hot, humid or excessively dusty places.
- Do not block or cover the ventilation openings. For ventilation, leave a space of at least 10 cm all around the set.
- Do not install the TV where it may be exposed to mechanical vibrations.

For Safe Operation

- Do not operate the TV set on anything other than a 220-240V AC, 50Hz supply.
- Do not operate the TV if any liquid or solid objects fall in through the ventilation slots. Have it checked immediately.
- For environmental and safety reasons, it is recommended that the TV set is not left in standby mode when not in use. Switch off at the mains.
- Do not disconnect the TV by pulling on the power cable. Disconnect by removing the mains plug.

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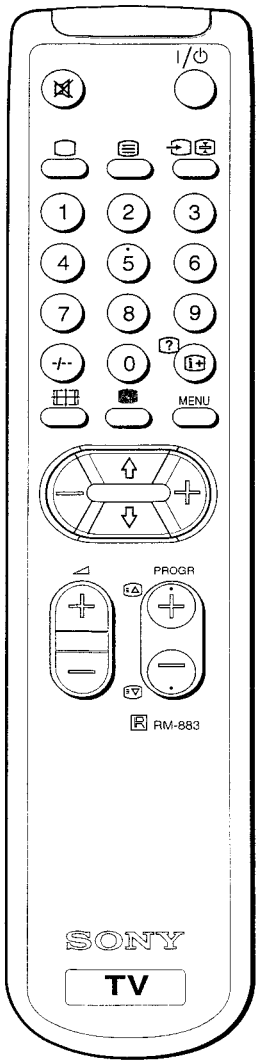
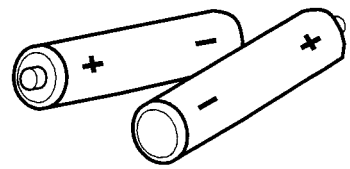
Checking the Accessories Supplied

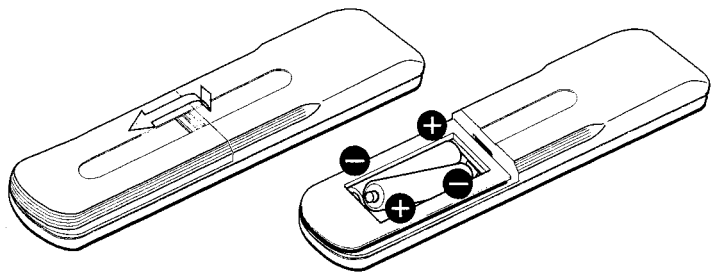


Remote Control



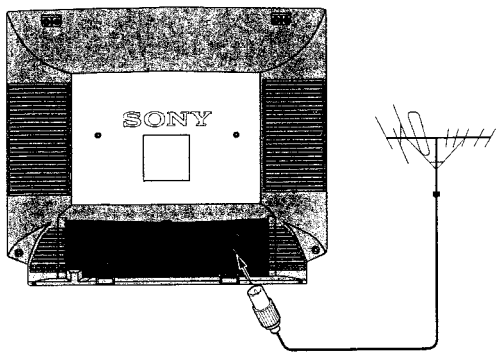
Batteries

Inserting Batteries into the Remote Control



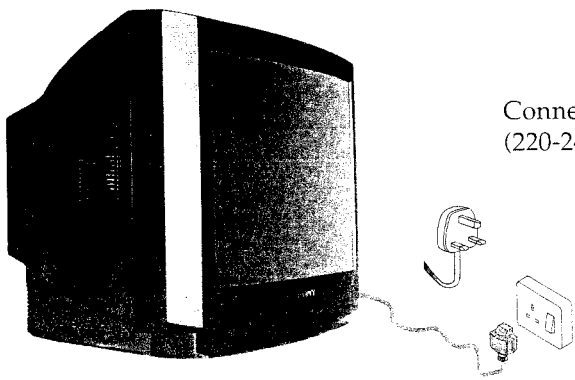
Always remember to dispose of used batteries in an environmental friendly way.

Connecting the Aerial

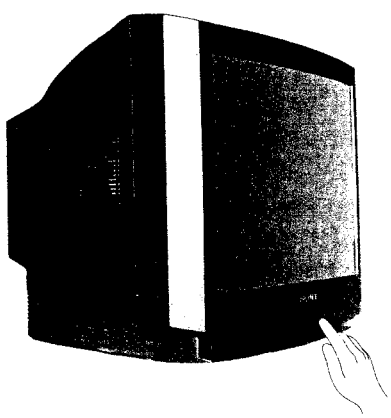


Connect a conventional aerial to the socket marked ⅂Γ on the rear of the TV.

Switching on the TV



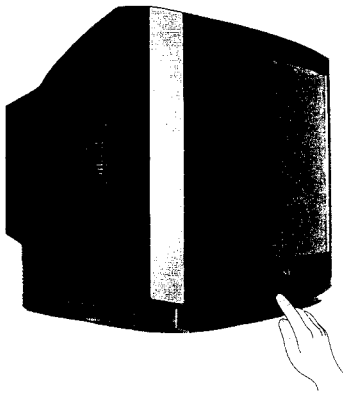
Connect the TV plug to the mains socket (220-240V AC, 50Hz) and switch on.



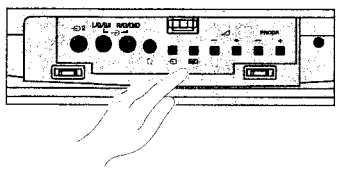
Push in the **on/off** switch on the front of the TV.

Automatically Tuning the TV

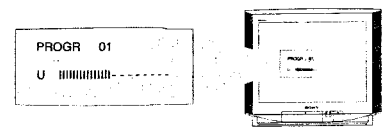
You need to tune the TV to receive channels. By following the instructions below, this TV will automatically search and store all available channels for you.



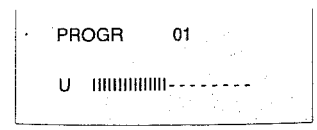
Press the flap on the front of the TV to reveal the front control panel.

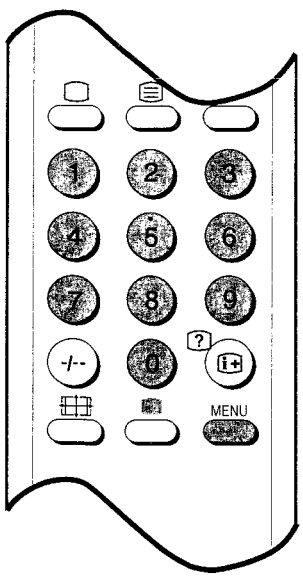


Press and hold in the ▶▶| button (for approx 2 seconds) until the automatic tune display appears on the TV screen.



The U in the display flashes then stops briefly each time the TV automatically tunes in to a channel. The bar on the TV screen moves from left to right as the TV searches for all available channels.



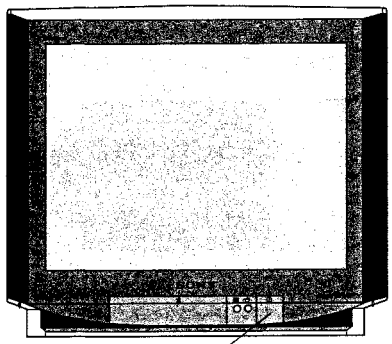


When the autotune procedure is complete, the menu will disappear from the TV screen. You can now view the channels by pressing the numbered buttons on the remote control.

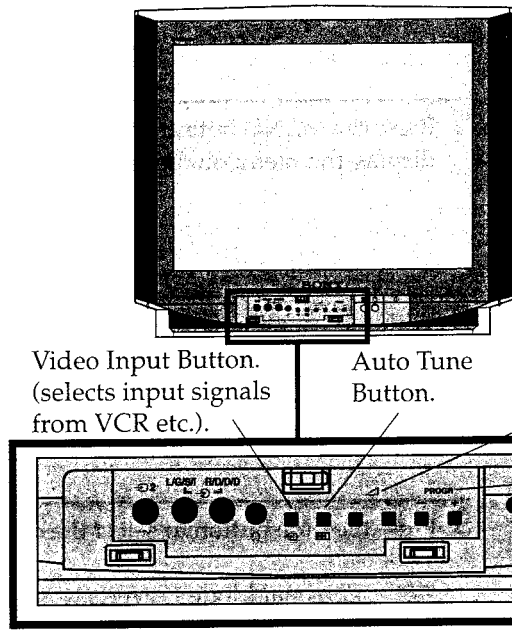
If you wish to rearrange the order of the channels, please refer to the "Exchanging Programme Positions" section of this instruction manual.

Notes: • If you wish to stop the "Autotune" procedure, press the MENU button on the remote control.

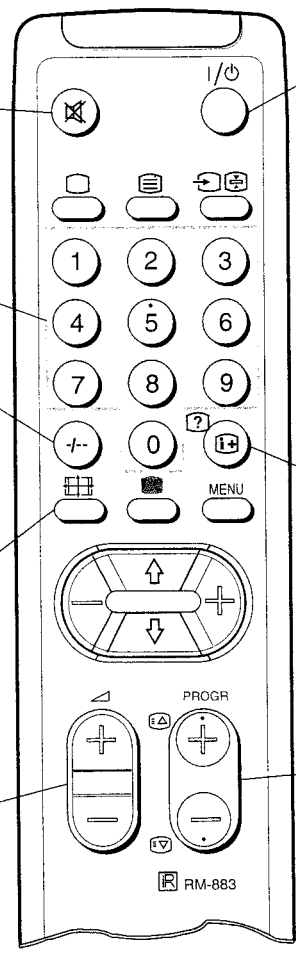
Overview of TV Buttons



On/Off Switch.


Video Input Button. (selects input signals from VCR etc.).
Auto Tune Button.
Volume Control Buttons.
Programme Up or Down Buttons. (selects TV channels).

Overview of Remote Control Buttons



To Mute Sound

Press to mute TV sound. Press again to restore the sound.

To Select Channels

Press to select channels.

For double-digit programme numbers, e.g. 23, press -/-- first, then the buttons 2 and 3.
If you enter an incorrect first digit, this should be corrected by entering another digit (0-9) and then selecting -/-- button again to enter the programme number of your choice.

To Change Screen Format

Press to view programmes in 16:9 mode.
Press again to return to 4:3 mode.

To Adjust TV Volume

Press to adjust the volume of the TV.

To Temporarily Switch Off TV

Press to temporarily switch off TV. Press again to switch on TV from standby mode.
To save energy we recommend switching off completely when TV is not in use.
NOTE: After 15 -30 minutes without a TV signal and without any button being pressed, the TV switches automatically into standby mode.

To Reveal On Screen Information

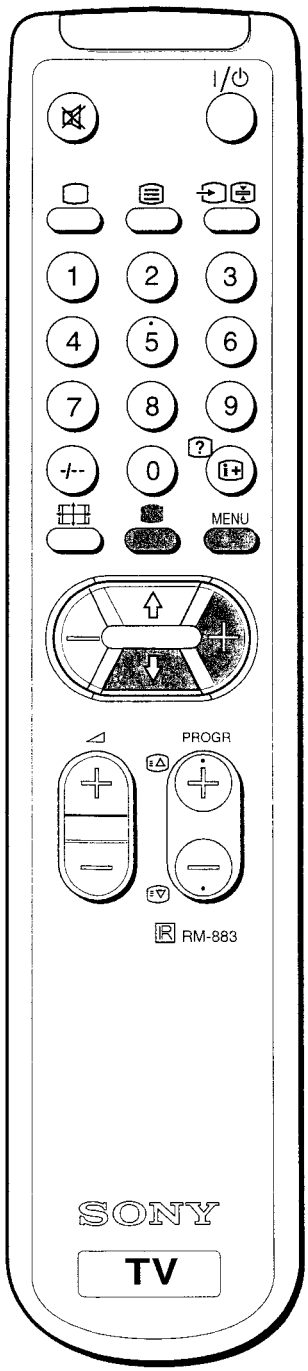
Press to reveal all on-screen indications. Press again to cancel.

To Select Channels

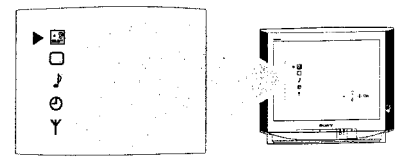
Press to select channels.

Using Select Mode

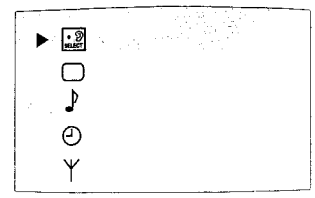
You can select different preset picture and sound modes.



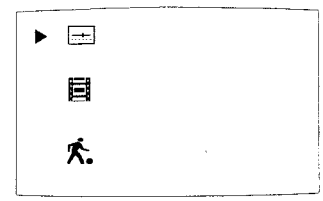
1 Press the MENU button on the remote control to display the menu on the TV screen.



2 With the cursor pointing at the SELECT symbol on the TV screen as shown, press the yellow button.



3 Press the blue button to select the desired mode:



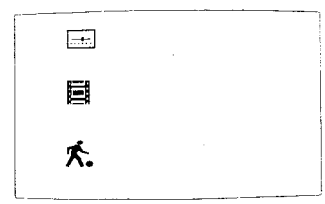
- Personal Mode - reverts to settings made in "Adjusting the Picture and Sound" sections of the manual
- Movie Mode - for films
- Live Mode - for programmes broadcast live

4 Press the MENU button to remove the menu display from the TV screen.

Note: The mode selected in step 3 is now stored.

Changing Modes Quickly

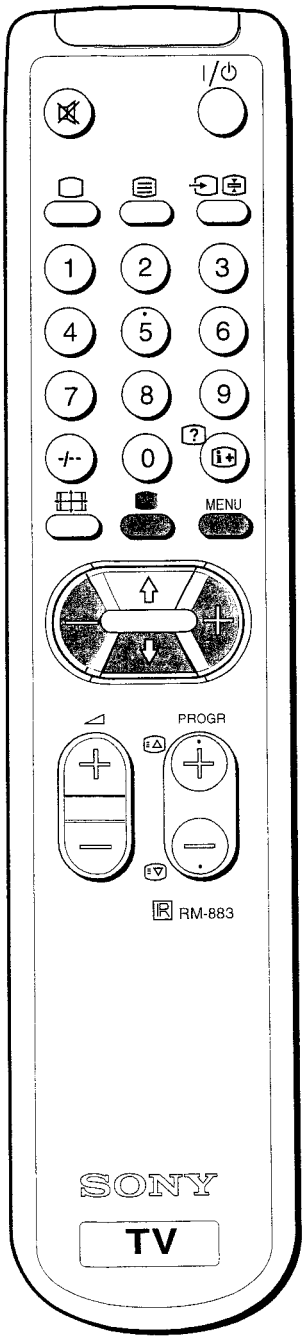
1 Press the white button on the remote control to display the three different modes.



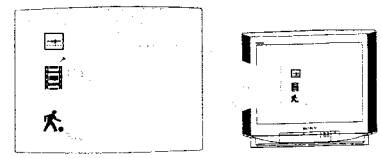
2 Press the white button again to select your desired mode.

Adjusting the Picture

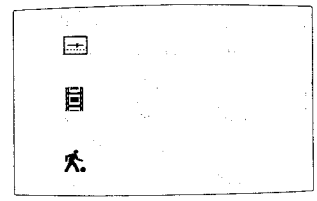
Although the picture is adjusted at the factory, you can modify it to suit your own requirement.



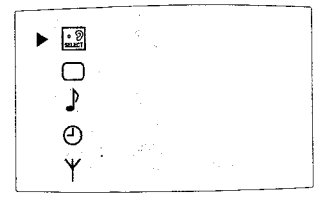
1 Press the white button ■ on the remote control to display the mode menu on the TV screen.



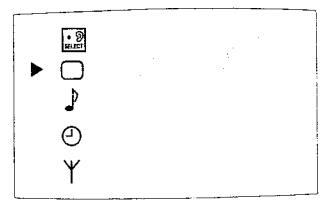
2 Press the white button ■ to step between the three different modes and to stop on the personal mode symbol [⊣⊢] as shown.



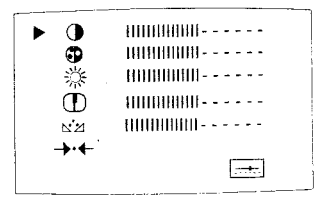
3 Press the MENU button to display the menu on the TV screen.



4 Press the blue button on the control to select the ▢ symbol on the TV screen then press the yellow button.



5 Press the blue button to select the item you wish to change (see below).



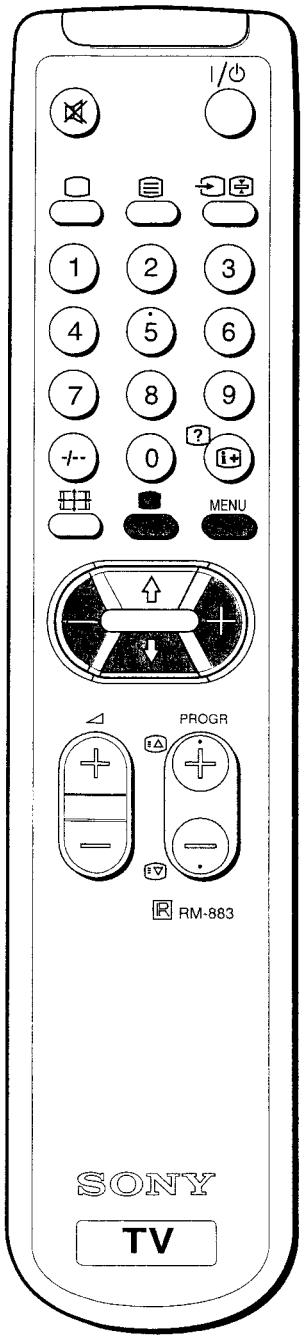
6 Press the red or yellow button to alter the selected item.

7 Press the MENU button to remove the menu display from the TV screen.

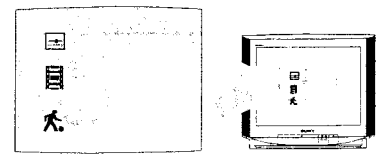
Symbol	Item
◑	• Contrast
◒	• Colour
☼	• Brightness
◐	• Sharpness
◹◿	• Hue control (only for NTSC video signals)
→·←	• Reset - resets to factory preset picture level
[⊣⊢]	• Represents the mode selected in the "Using Select Mode" section.

Adjusting the Sound

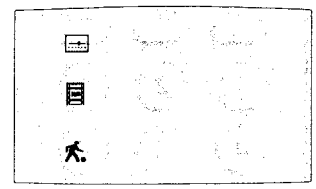
Although the sound is adjusted at the factory, you can modify it to suit your own requirement.



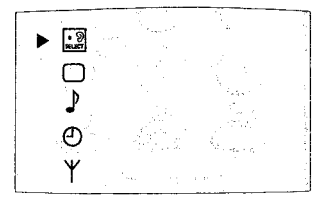
1 Press the white button ■ on the remote control to display the mode menu on the TV screen.



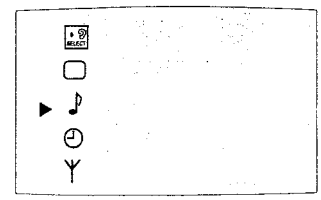
2 Press the white button ■ to step between the three different modes an to stop on the personal mode symbol [⊟] as shown.



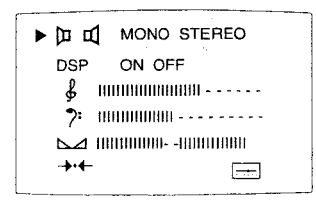
3 Press the MENU button to display the menu on the TV screen.



4 Press the blue button to select the ♪ symbol on the TV screen then press the yellow button.



5 Press the blue button to select the item you wish to change (see below).



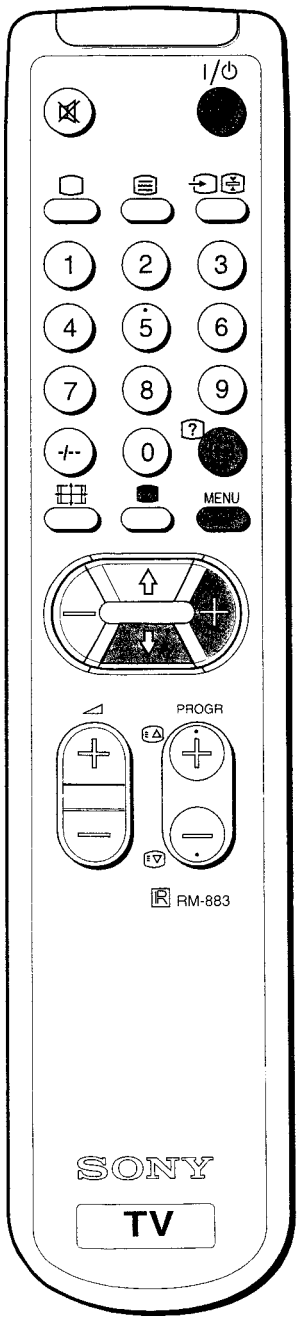
6 Press the red or yellow button to alter the selected item.

7 Press the MENU button to remove the menu display from the TV screen.

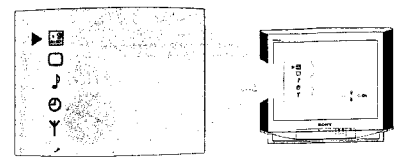
Symbol	Item
	• Mono sound or/Stereo sound A: Channel 1 sound or mono sound/ B: Channel 2 sound (to select your desired language from a dual sound broadcast)
DSP	• On/Off (digital sound processor)
	• Treble
	• Bass
	• Balance
	• Reset (resets to factory preset sound level)
	• Represents the mode selected in the "Using Select Mode" section of the manual.

Using the Sleep Timer

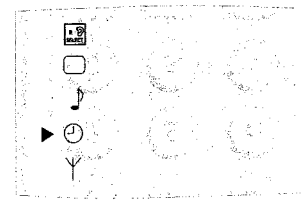
The TV may be set to switch automatically to the standby mode after a length of time chosen by you. You may set the time in 15 minute steps up to 4 hours.



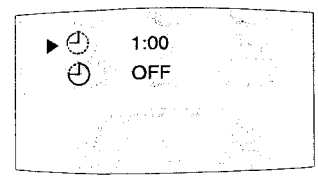
1 Press the MENU button on the remote control to display the menu on the TV screen.



2 Press the blue button on the control to select the ◴ symbol on the TV screen, then press the yellow button.

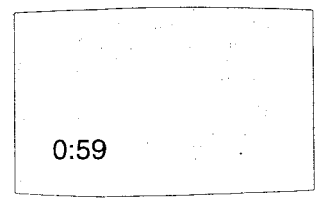


3 Press the yellow button repeatedly until the required amount of time delay appears on the screen.



4 Once the time delay has been selected, press the MENU button to remove the on-screen display.

One minute before standby, the display shown appears on the screen.

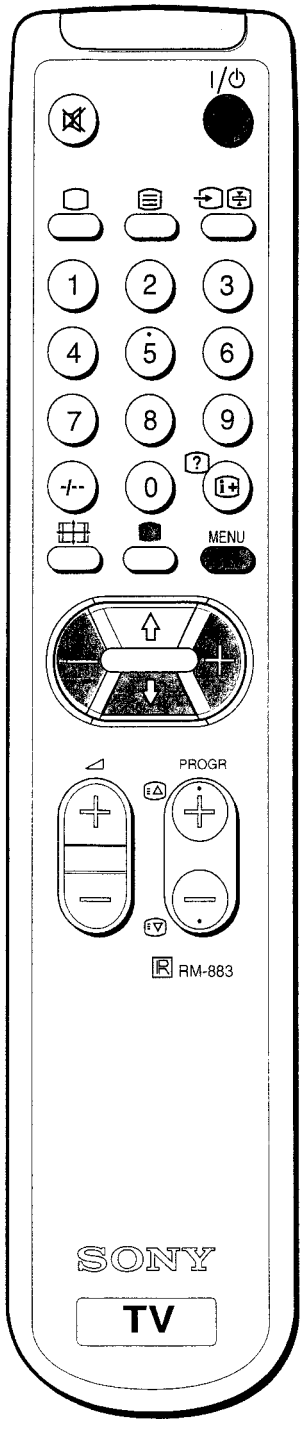


Notes:

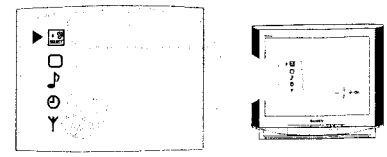
- When watching TV, press the ⓘ button to display time remaining.
- To return to normal operation from standby mode, press the I/⏻ button.

Using the Wake Up Timer

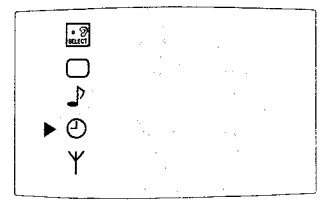
The TV may be set to switch automatically to the standby mode after a length of time chosen by you. You may set the time in 15 minute steps up to 12 hours.



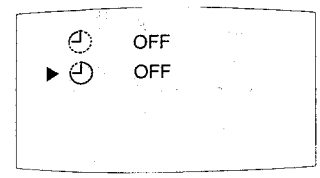
1 Press the MENU button on the remote control to display the menu on the TV screen.



2 Press the blue button on the control to select the ◴ symbol on the TV screen, then press the yellow button.

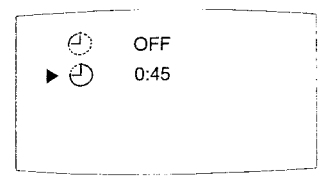


3 Press the blue button on the control to select the ◴ symbol on the TV screen, then press the yellow button.



4 Press the red or yellow button to set the time.

0:00 (OFF) 0:15 0:30 0:45 .....12:00



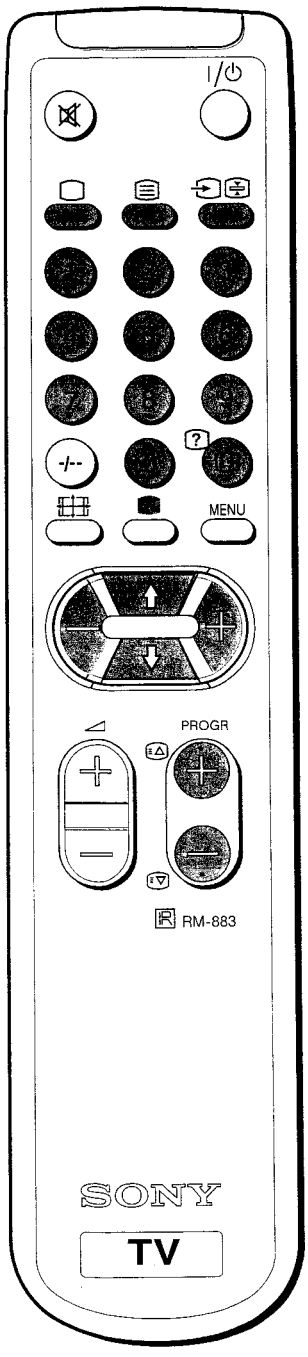
5 Press the standby button I/⏻.
The standby indicator on the TV flashes regularly to indicate that the Wake Up Timer is active.
After the selected length of time, the TV switches on automatically.

Notes:

- If you use the "Wake Up Timer" to switch the TV on and for one hour after switching on, no TV or Remote Control button is pressed, the TV switches itself back into Standby mode and the indicator ⏻ on the TV lights.
- Any temporary power failure will cause a misfunction in the "Wake Up Timer" and you will have to reset the "Wake Up Timer".

Viewing Teletext

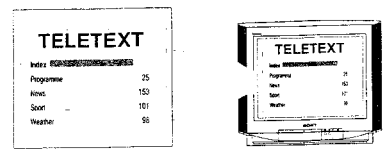
Teletext is an information service transmitted by most TV stations.



Selecting Teletext

1 Press a number button on the remote control to select the channel which carries the teletext service you wish to receive.

2 Press the ▤ button on the remote control to switch on teletext.



3 Input three digits for the page number using the numbered buttons on the control.

4 Press the ▢ button to switch off teletext.

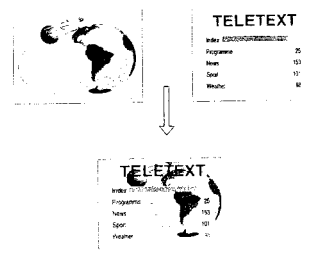
Note: Teletext errors may occur if the broadcasting signals are weak.

Using Other Teletext Functions

To Superimpose Teletext on to the TV

Press ▤ once in teletext mode or twice in TV mode to superimpose teletext on to the TV screen.

Press ▤ again to cancel teletext mode.



To Move to Next or Preceding Page

Press PROGR +/- on the remote control to select the previous or next page.

To Freeze a Teletext Page

Press ▤ on the control to freeze the page.
Press ▤ again to cancel the freeze.

Revealing concealed information (eg: answers to a quiz)

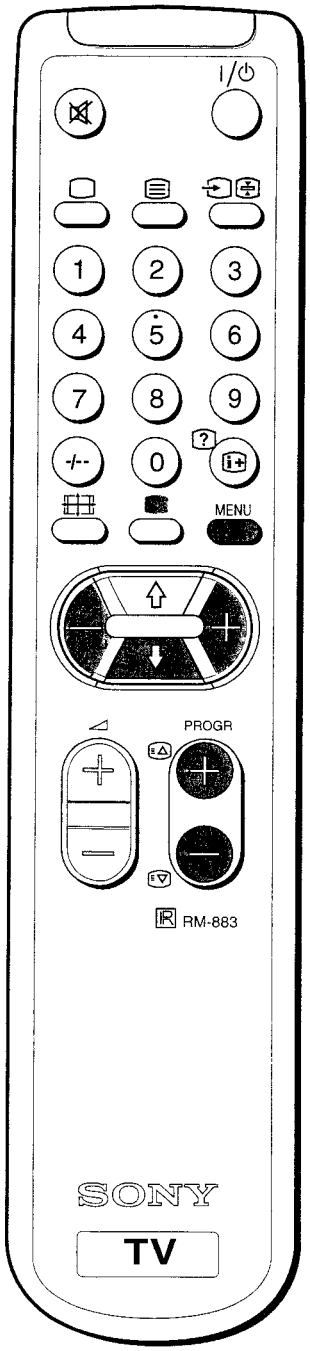
Press [?] to reveal information.
Press again to conceal the information.

Using colour buttons to access pages (Fastext)

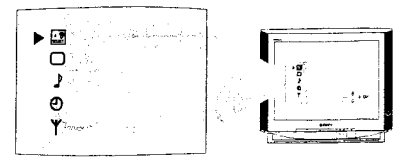
When the colour coded menu appears at the bottom of a page, press the colour button (green, red, yellow or blue) to access the corresponding page.

Exchanging Programme Positions

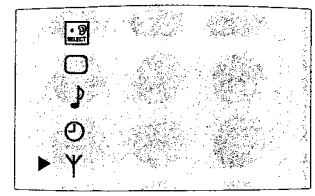
After tuning you may wish to change the order in which the channels appear on the TV. You may wish for example to exchange the channel on programme number 8 with the channel on programme number 4.



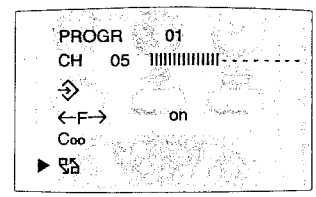
1 Press the MENU button on the remote control.



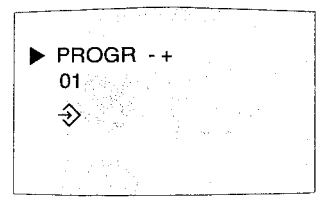
2 Press the blue button on the control to select ᛉ on the TV screen, then press the yellow button.



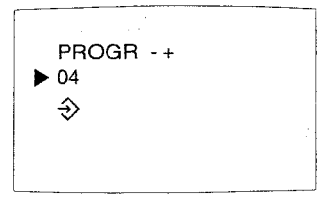
3 Press the blue button to select ⇆ then press the yellow button.



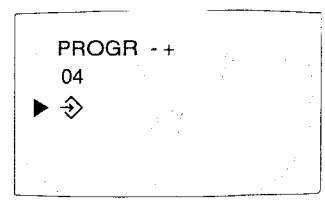
4 With the cursor pointing at PROGR on the TV screen as shown, press PROGR + or - button until the channel you wish to rearrange appears on screen, then press the blue button once.



5 Press the red or yellow button to select the new programme number (e.g. PROGR 04) for your selected channel.



6 Press the blue button to select ⇆ then press the yellow button to exchange the channels.

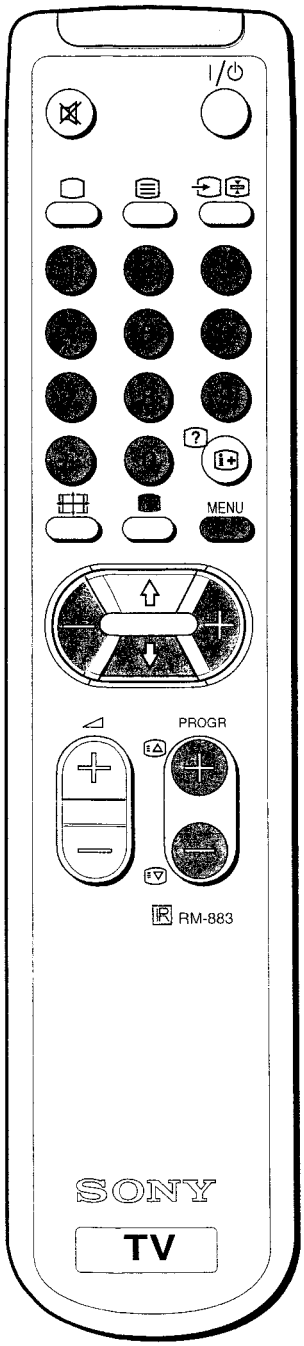


7 Repeat steps 4 to 6 if you wish to change the order of the other channels on your TV, then press MENU to return to normal TV screen.

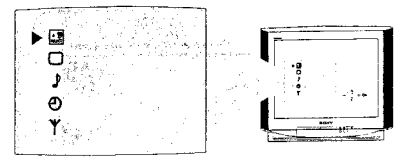
8 Press the PROGR+/- button to view your selected channels on their new programme numbers.

Manually Tuning the TV

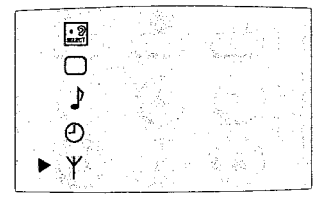
You have already tuned the TV to receive all available channels using the 'Automatically Tuning the TV' procedure at the start of this manual. You can however carry out this operation manually using the following instructions.



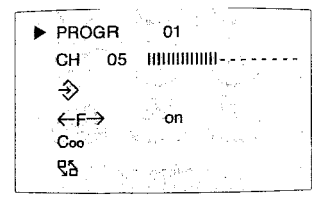
1 Press the MENU button on the remote control to display the menu on the TV screen.



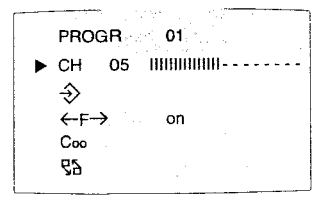
2 Press the blue button to select the Y symbol on the TV screen then press the yellow button.



3 With the cursor pointing at PROGR on the TV screen as shown, press PROGR + or - button on the remote control to allocate a programme number to the channel (eg PROGR 01). For double digit numbers e.g. 55, press the -/-- button on the remote control then the corresponding numbered buttons.

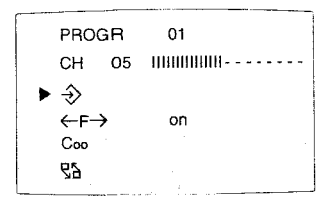


4 Press the blue button to select the tuning bar scale then press the yellow or red button once to start the channel search. (Yellow to search up the scale or red to search down). When a channel is found it appears on the TV screen.



5 If you do not wish to store this channel on the programme number you selected, press the yellow or red button to continue searching for the desired channel.

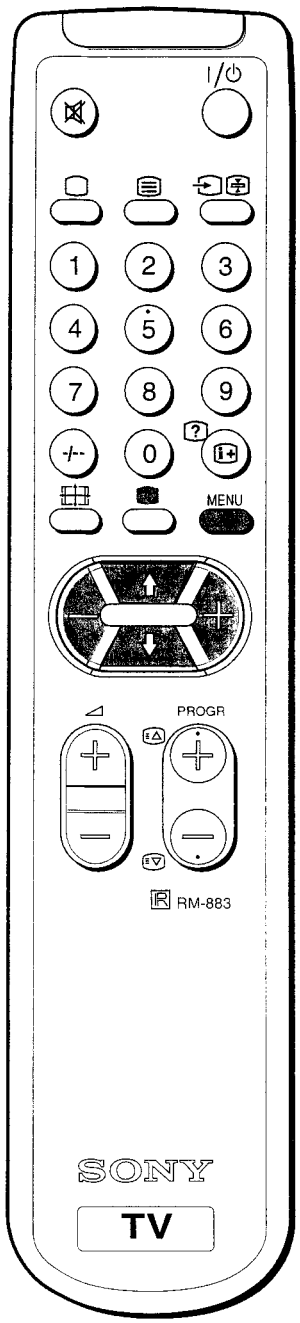
6 If this is the channel you wish to store, press the blue button to select the ⇨ symbol on the screen then press the yellow button to store.



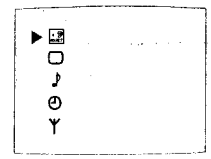
7 Repeat steps 3 to 6 if you wish to store more channels then press the MENU button to remove the menu from the TV screen.

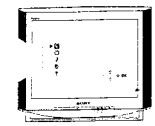
Fine-Tuning Channels

If a channel is slightly off tune, you can use this fine tune procedure to obtain a better picture reception.

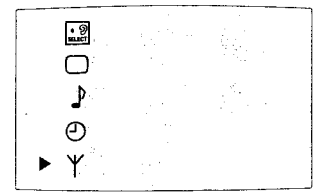


1 With the channel you wish to fine-tune on the screen, press the MENU button on the remote control. The menu display appears on the TV screen.

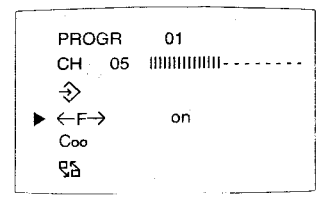




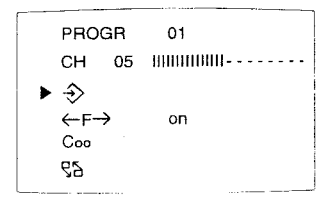
2 Press the blue button on the remote control to select the Y symbol on the TV screen then press the yellow button.



3 Press the blue button to select the ←F→ symbol on the TV screen then press the red or yellow button to adjust the tuning.



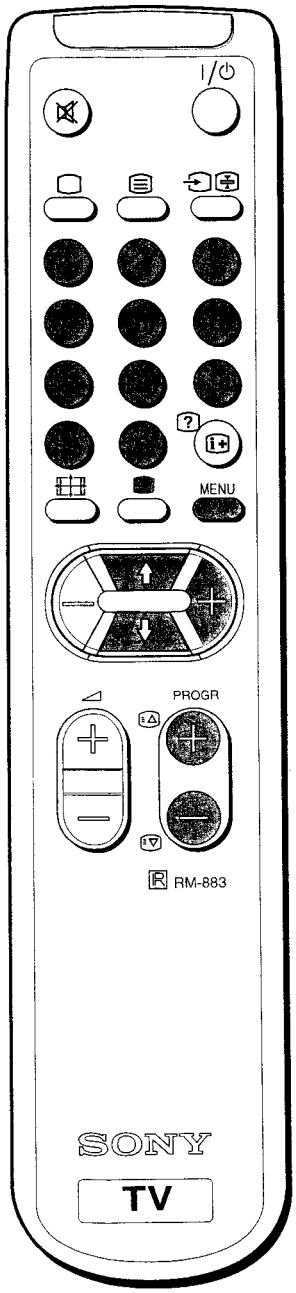
4 Press the green button to select the ⇨ symbol on the TV screen then press the yellow button to store.



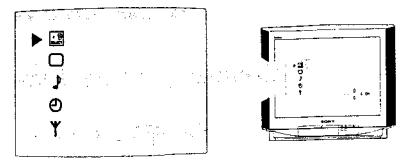
5 Press the MENU button to remove the menu from the TV screen.

Skipping Programme Positions

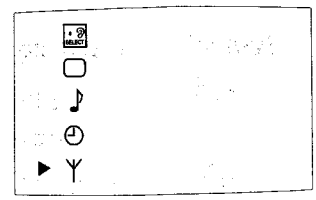
You can programme this TV to skip any unwanted programme numbers when they are selected with the PROGR +/- buttons.



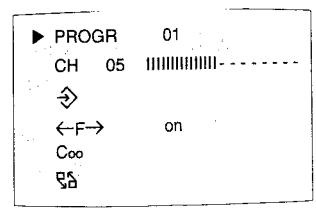
1 Press the MENU button on the remote control to display the menu on the TV screen.



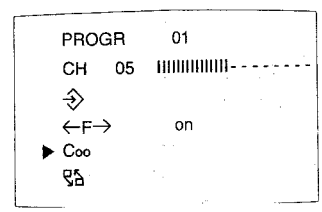
2 Press the blue button on the control to select the ᛉ symbol on the TV screen then press the yellow button.



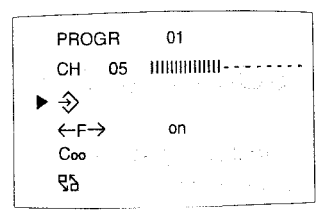
3 With the cursor pointing at PROGR on the TV screen as shown, press PROGR + or - button on the remote control to select the programme number you want to skip.



4 Press the blue button to select Coo on the TV menu screen then press the yellow button on the remote control.



5 Press the green button to select the ⇆ symbol on the TV screen then press the yellow button to store.



6 Repeat steps 3 to 5 to skip other unused programme positions.

7 Press the MENU button to remove the menu from the TV screen.

Note: Tuned programmes, once skipped, are deleted and therefore not visible. To reinstate, refer to the "Manually Tuning the TV" section of this manual.

Using Optional Equipment

You can connect optional audio or video equipment to your TV, such as a VCR, a camcorder or video games as shown.

Select and View the Input Signal

1 Connect your equipment to the designated TV socket.

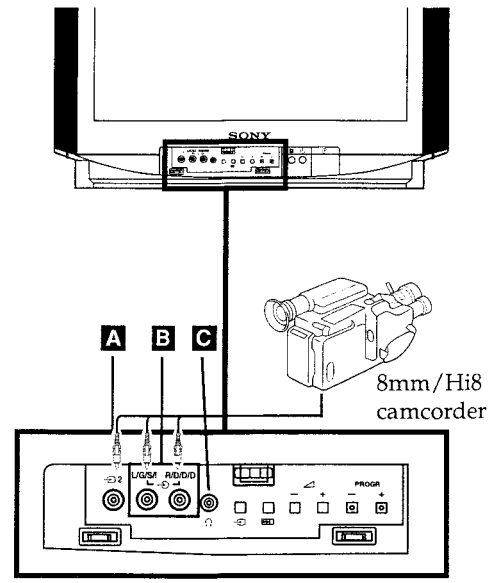
2 Press the ⊕ button repeatedly on your remote control until the correct input symbol appears on the TV screen.

Symbol	Input signals
⊕1	• Audio/video input signal through the Euro AV connector E
⊕···	• RGB input signal through the Euro AV connector E
⊕2	• Audio/video input signal through the Euro AV connector D or the phono sockets A and B
⊕S	• S video input signal through the Euro AV connector D.

3 Switch on the connected equipment.

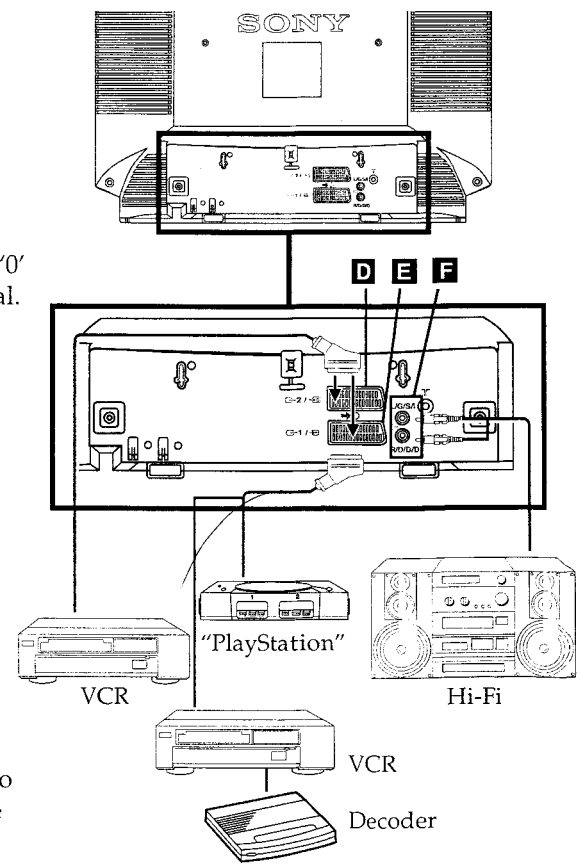
4 To return to normal TV picture, press the ▢ button on the remote control.

Front of TV



Note: To avoid picture distortion, do not connect equipment to the A and D connectors at the same time.

Retro del televisore



Additional Information

Connecting a VCR

We recommend you tune in the VCR signal to TV programme number '0' using the 'Manually Tuning in the TV' section of this instruction manual.

Connecting Headphones

Plug in your headphones to the socket C on the front of the TV set.

Connecting Decoders

Plug in decoders to the socket E on the rear of the TV.

Connecting to External Audio Equipment

Plug in your Hi-Fi equipment to the F sockets on the rear of the TV if you wish to amplify the audio output from the TV.

For Mono Equipment

Connect the phono plug to the L/G/S/I socket on the front of the TV and select ⊕2 input signal using the instructions above. Finally, refer to the "Adjusting the Sound" section of this manual and select "A" on the sound menu screen.

Specifications

TV system
I

Colour system
PAL
NTSC 3.58, 4.43 (only Video In)

Channel coverage
UHF: B21-B69

Picture tube
HiBlack Trinitron
Approx. 55 cm (21 inches) (Approx. 51 cm picture measured diagonally), 100° deflection

Inputs
- Rear Terminals
  - 1/ 21-pin Euro connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output
  - 2/S 21-pin Euro connector (CENELEC standard) including audio/video input, S-video input, Monitor audio/video output
- Front Terminals
  - 2 video input - phono jack
  - 2 audio inputs - phono jacks

Outputs
- Headphones jack - minijack stereo
- Audio outputs - phono jacks

Sound output
2 x 10 W (RMS)

Power Consumption
105 W

Standby Power Consumption
0.8 W

Dimensions (wxhxd)
Approx. 527 x 449 x 466 mm

Weight
Approx. 23 kg

Accessories supplied
RM-883 Remote Control (1)
IEC designated batteries (2)

Other features
TELETEXT, Fastext
NICAM Stereo

Design and specifications are subject to change without notice.

Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	• Plug the TV in. • Press the ⏻ button on the front of TV. • If the ⏻ indicator is on press I/⏻ button or a programme number button on the remote control. • Check the aerial connection. • Check that the selected video source is on. • Turn the TV off for 3 or 4 seconds and then turn it on again using the ⏻ button on the front of the TV.
Poor or no picture (screen is dark), but good sound	• Using the MENU system, select the Picture Adjustment display. Adjust the brightness, picture and colour balance levels. • From the Picture Adjustment display select →·← to return to the factory settings.
Poor picture quality when watching a RGB video source	• Press the ⏎ button repeatedly on the remote control until the RGB symbol ⏎ is displayed on the screen.
Good picture, no sound	• Press the ◿+/– button on the remote control. • If 🔇 is displayed on the screen, press the 🔇 button on the remote control.
No colour on colour programmes	• Using the MENU system, select the Picture Adjustment display. Adjust the colour balance. • From the Picture Adjustment display select →·← to return to the factory settings.
Distorted picture when changing programmes or selecting teletext	• Turn off any equipment connected to the 21 pin Euro connector on the rear of the TV.
Noisy picture when viewing TV channel	• Adjust Fine Tuning to obtain better picture reception.
Remote control does not function	• Replace the batteries.
The standby indicator ⏻ on the TV flashes even though the "Wake Up Timer" function is not in use.	• Contact to your nearest Sony service centre.

- **If you continue to have these problems, have your TV serviced by qualified personnel.**
- **NEVER open the casing yourself.**

Television Channel Number Guide

Only the main transmitters are listed. Information regarding the regional sub-relay channel numbers can be obtained by contacting The BBC Engineering Information Dept. (0181) 752 5040.

MAIN TRANSMITTERS	BBC1	BBC2	ITV	CH4	CH5
London & South East					
① Bluebell Hill	40	46	43	65	–
② Crystal Palace	26	33	23	30	–
③ Dover	50	56	66	53	–
④ Heathfield	49	52	64	67	–
⑤ Oxford	57	63	60	53	49
South-West					
⑥ Beacon Hill	57	63	60	53	–
⑦ Caradon Hill	22	28	25	32	–
⑧ Huntshaw Cross	55	62	59	65	67
⑨ Redruth	51	44	41	47	37
⑩ Stockland Hill	33	26	23	29	–
Channel Islands					
⑪ Fremont Point	51	44	41	47	–
South					
⑫ Hannington	39	45	42	66	–
⑬ Midhurst	61	55	58	68	–
⑭ Rowridge	31	24	27	21	–
West					
⑮ Mendip	58	64	61	54	37
East					
⑯ Sandy Heath	31	27	24	21	39
⑰ Sudbury	51	44	41	47	–
⑱ Tacolneston	62	55	59	65	52
Midlands (West)					
⑲ Ridge Hill	22	28	25	32	–
⑳ Sutton Coldfield	46	40	43	50	–
㉑ The Wrekin	26	33	23	29	–
Midlands (East)					
㉒ Waltham	58	64	61	54	–
Northern Ireland					
㉓ Brougher Mountain	22	28	25	32	–
㉔ Divis	31	27	24	21	–
㉕ Limavady	55	62	59	65	–
North					
㉖ Belmont	22	28	25	32	56
㉗ Emley Moor	44	51	47	41	37
North-West					
㉘ Winter Hill	55	62	59	65	48
North-East					
㉙ Bilsdale West Moor	33	26	29	23	–
㉚ Caldbeck	30	34	28	32	56
㉛ Chatton	39	45	49	42	–
㉜ Pontop Pike	58	64	61	54	–
Scotland					
㉝ Angus	57	63	60	53	–
㉞ Black Hill	40	46	43	50	37
㉟ Sandale	22	67	–	–	–
㊱ Caldbeck	–	–	28	32	56
㊲ Craigkelly	31	27	24	21	48
㊳ Darvel	33	26	23	29	–
㊴ Durris	22	28	25	32	67
㊵ Eitshal (Lewis)	33	26	23	29	–
㊶ Keelylang Hill	40	46	43	50	–
㊷ Knock More	33	26	23	29	–
㊸ Rosemarkie	39	45	49	42	–
㊹ Rumster Forest	31	27	24	21	–
㊺ Selkirk	55	62	59	65	52
Wales					
㊻ Blaenplwyf	31	27	24	21	56
㊼ Carmel	57	63	60	53	–
㊽ Llanddona	57	63	60	53	–
㊾ Moel-y-Parc	52	45	49	42	–
㊿ Presely	46	40	43	50	37
(51) Wenvoe	44	51	41	47	–